

PCT

**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau**



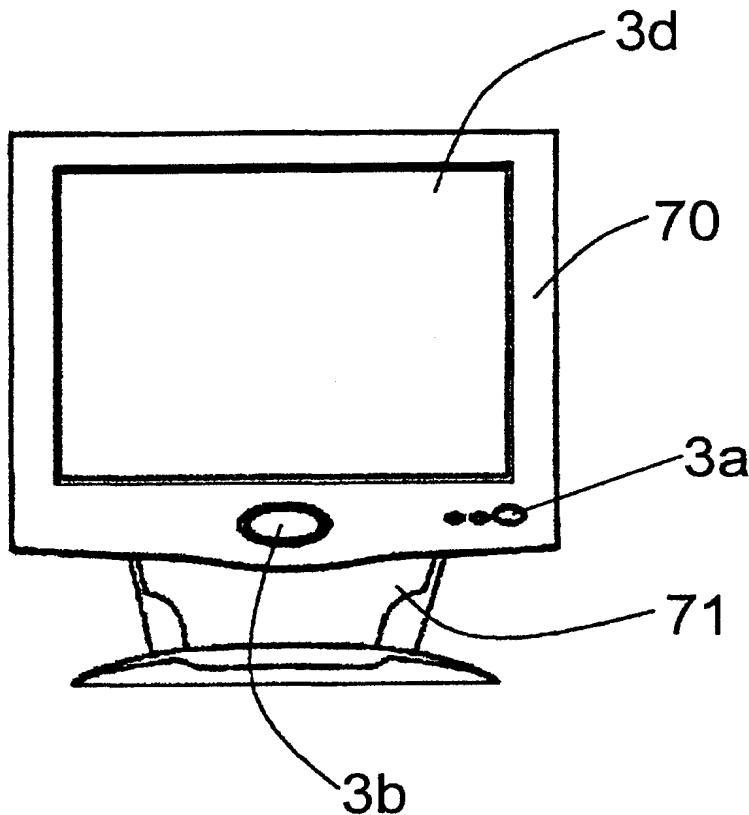
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 3/14, G06K 9/00		A1	(11) International Publication Number: WO 00/63769 (43) International Publication Date: 26 October 2000 (26.10.00)
(21) International Application Number:	PCT/KR00/00374		(81) Designated States: AE, AT, AU, BR, CA, CH, CN, CZ, DE, DK, ES, FI, HR, HU, ID, IL, JP, KP, MX, NO, NZ, PL, RU, SG, TR, US, VN, ZA, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
(22) International Filing Date:	20 April 2000 (20.04.00)		
(30) Priority Data:	1999/6559	20 April 1999 (20.04.99)	KR
(71)(72) Applicant and Inventor:	HAN, Dae, Ick [KR/KR]; 402 Young-Hwa Park Villa, 21-1, Koo-Wee 2Dong, Kwang-Jin Goo, Seoul 143-201 (KR).		<p>Published</p> <p><i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <i>In English translation (filed in Korean).</i></p>

(54) Title: FINGERPRINT RECOGNITION SECURITY COMPUTER MONITOR

(57) Abstract

This invention relates to fingerprint recognition system equipped monitor. Finger print recognition is one of most useful technologies in the biometrics recognition field. And there are many types of fingerprint recognition sensors and it is common knowledge with flow program developed recently. And this invention is various composing on the inner structure to the outer surface of monitor case. And exposing finger print recognition window of fingerprint recognition sensor on the surface of computer monitor or display device. That can recognize individuals and operate by touching user's fingerprints and using its taken fingerprint information. Accordingly, this new invention offers the common knowledge computer monitor or display devices equipped with these common knowledge finger print recognition system using its flow program. These monitors and display devices are useful for information Security of computer and network and security of various kinds of electronic commerce.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon	KR	Republic of Korea	PL	Poland		
CN	China	KZ	Kazakhstan	PT	Portugal		
CU	Cuba	LC	Saint Lucia	RO	Romania		
CZ	Czech Republic	LI	Liechtenstein	RU	Russian Federation		
DE	Germany	LK	Sri Lanka	SD	Sudan		
DK	Denmark	LR	Liberia	SE	Sweden		
EE	Estonia			SG	Singapore		

FINGERPRINT RECOGNITION SECURITY COMPUTER MONITOR

TECHNICAL FIELD

5 This invention relates to computer monitor, in particular, to fingerprint recognition system equipped monitor, that is composed of computer monitor in common or display device receiving display signals, and fingerprint recognition system in various manners.

10

BACKGROUND ART

This invention relates to fingerprint recognition system equipped monitor composed of monitor or display device and fingerprint recognition system that can recognize individuals by user's fingerprints, one of most useful technologies in the biometric field. And there are many types of fingerprint recognition sensors and it's common knowledge flow program developed recently(ex : Maker : Nitgen / Model : FDP01)- optical recognition, 15 semiconductor, surface dielectric methods, laser line scan methods and etc.. Among them optical recognition types have better recognition ability and endurance with less fail rates. Accordingly, This new invention offers the fingerprint recognition devices equipped of 20 computer monitor or display device and these common knowledge fingerprint recognition module, sensor and with using its flow 25 program

DISCLOSURE OF INVENTION

30 This invention offers computers monitor and display devices to recognize the fingerprint of users. These devices are made by equipping fingerprint recognition device in common knowledge to the case of computer monitor or display 35 devices on the inner structure to the outer surface, exposing

2

And driving its program, users input their fingerprint information by touching simply their fingers, instead of usual password, on the windows of the fingerprint recognition sensors on the surface of these monitors or display devices. And this taken 5 fingerprint information inputted in fingerprint recognition devices can be transferred to the computers and these transferred inform of computer, through port, to be used for recognizing users and the computer admit or disapprove to use the access to the inner information of computers or networks by using its 10 fingerprint informs and various fingerprint flow programs of common knowledge. These monitors and display devices are useful for information security of computer and network and security of various kinds of electronic commerce.

15 BRIEF DESCRIPTION OF DRAWINGS

For the clear understanding of this invention and the advantages of it, drawings are attached with descriptions.

20 FIG. 1, illustration is an exemplification how the computer monitor composed of the case (70), the stand (71) and the power button (3a) is equipped with the fingerprint recognition system (3b) from the inside to the outer surface.

25 FIG. 2 illustrates the side view of this invention's computer monitor with how to use touching on window of sensor of the fingerprint recognition. It composed of the case parts (70), the stand (71) and the power button (3a) in which the fingerprint recognition system (3b) is equipped front of the monitor at the 30 bottom from the inside to the outer surface below the display part (3d) of the monitor. And the fingerprint of users can be touched on the recognition systems (3b). The port (3c) of the fingerprint recognition system is connecting to the computers and through this port, fingerprint information access use 35 recognition program.

3

BEST MODE OF CARRING OUT THE INVENTION

For the clear understanding of this invention and the advantages of it, drawings are attached with descriptions

5

FIG. 2 illustrates effectively of this invention's computer monitor. It composed of the case (70), the stand (71) and the power button (3a) in which the fingerprint recognition system (3b) is equipped at the bottom from the inside to the outer surface below the display part (3d) of the monitor and the fingerprint of users can be touched on the recognition systems (3b). The port (3c) of the fingerprint recognition system is connecting to the computers, accessing fingerprint recognition program with the fingerprint information inputted.

10

WHAT IS CLAIMED IS

A computer monitor with the fingerprint recognition system, composed of computer monitor in general use and fingerprint recognition system (3b) which is fixed on the surface of the monitor case (70) that the window of fingerprint system is exposed to the outer surface for user's ease access.

A display device with the fingerprint recognition system, composed of display device in general use and fingerprintrecognition system (3b) which is fixed on the surface of the display device case that the window of fingerprint system is exposed to the outer surface for user's ease access.

ABSTRACT OF THE DISCLOSURE

20

This invention relates to fingerprint recognition system equipped monitor. Finger print recognition is one of most useful technologies in the biometrics recognition field. And there are many types of fingerprint recognition sensors and it is common knowledge

30

35

1/2

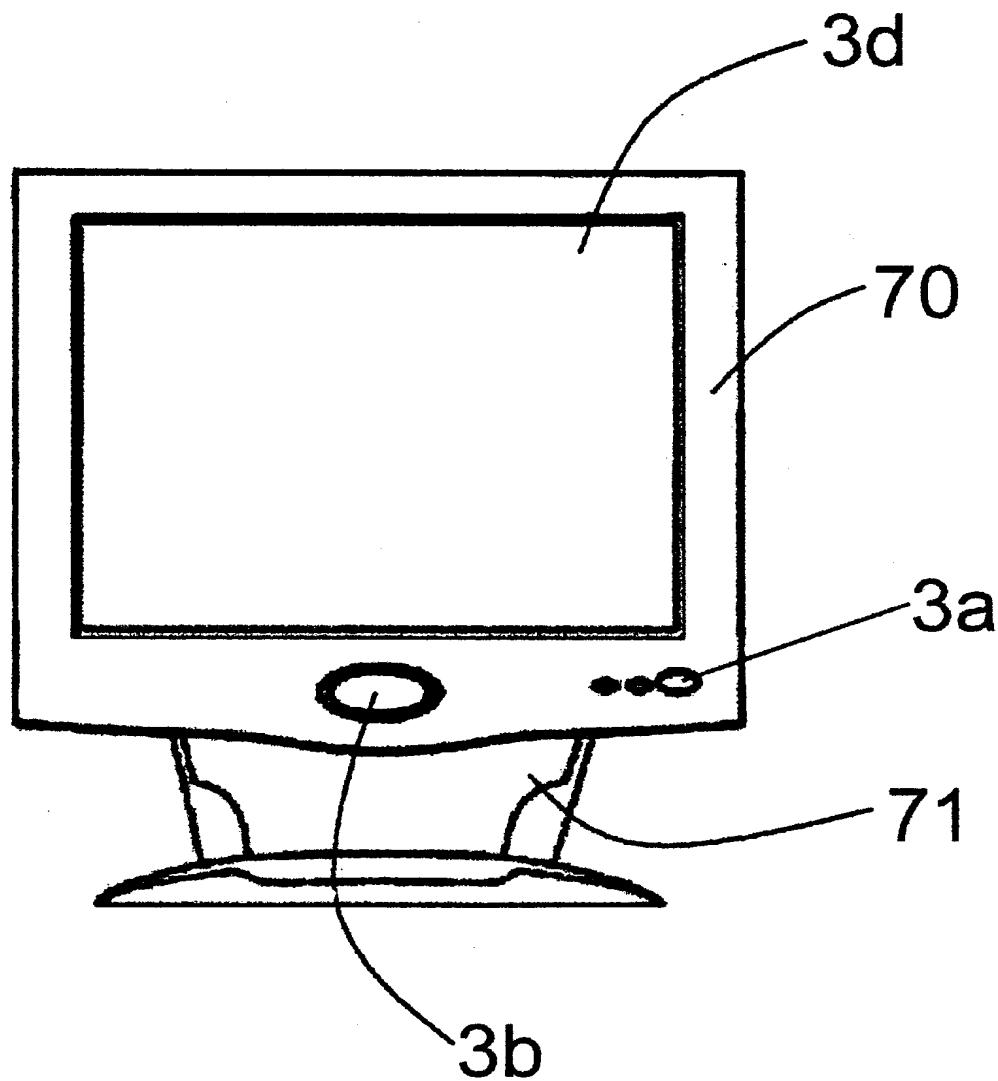


FIG-1

2/2

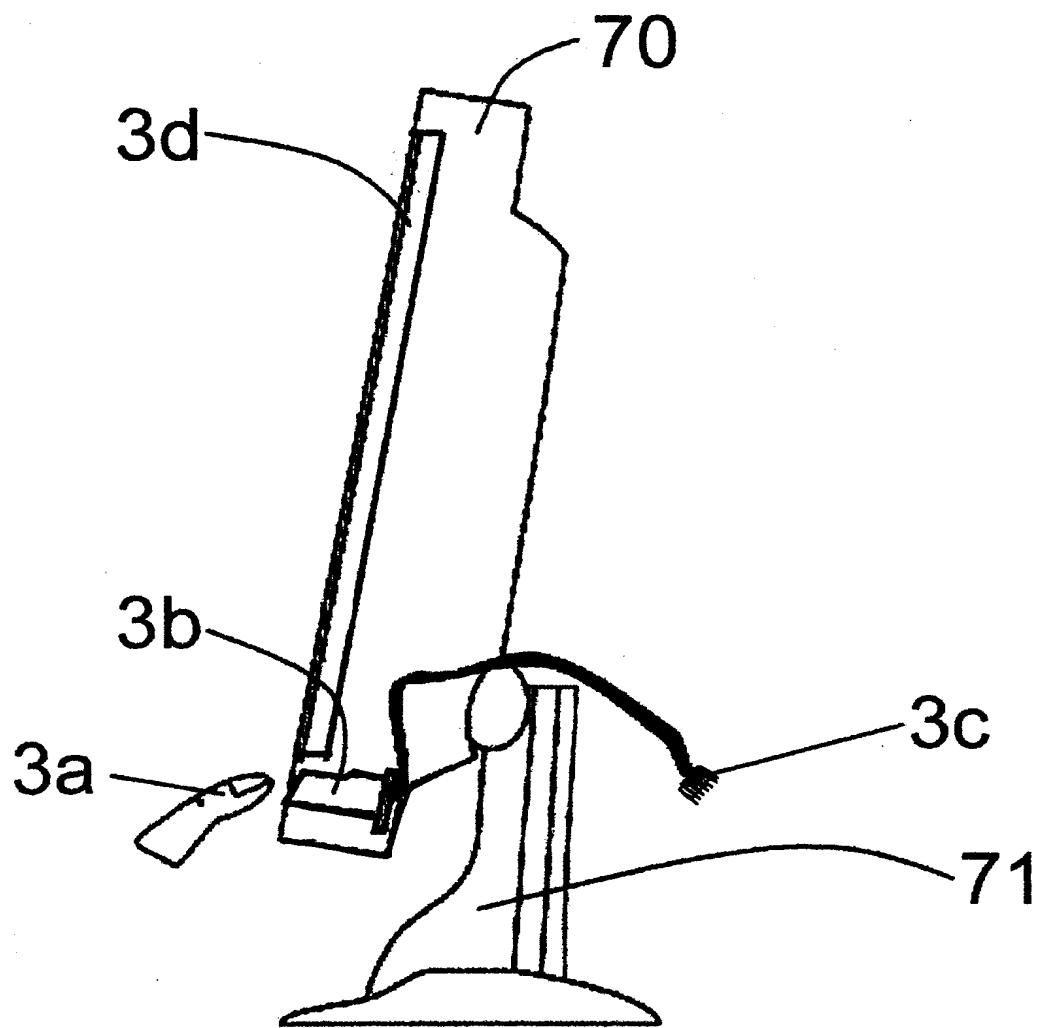


FIG-2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR00/00374

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 G06F 3/14, G06K 9/00**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimun documentation searched (classification system followed by classification symbols)

IPC7 G06F 3/14 G06F 17/60 G06F 1/00

Documentation searched other than minimun documentation to the extent that such documents are included in the fields searched

Korean patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the interntional search (name of data base and, where practicable, search terms used)
WPI, PAJ, IEEE/IEE Electronic Library (Since 1988) "FINGERPRINT, MONITER, DISPLAY, INTERNET, NETWORK"**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0593386 A2 (IBM CORPORATION) 20 APRIL 1994 (20. 04. 1994.) THE WHOLE DOCUMENT	1- 4
Y	KR 98-042976 A (YUN, TAE SIK) 17 AUGUST 1998 (17. 08. 1998.) THE WHOLE DOCUMENT	1- 4
X	JP 9-330140 A (NEC ENG LTD) 22 DECEMBER 1997 (22. 12. 1997.) THE WHOLE DOCUMENT	1, 2
X	KR 89-10731 A (LG CO., LTD.) 10 AUGUST 1989 (10. 8. 1989) THE WHOLE DOCUMENT	1, 2
PX	KR 2000-0184982 Y1 (SAM SUNG ELECTRONICS CO., LTD.) 28 MARCH 2000 (28. 03. 2000) THE WHOLE DOCUMENT	1- 4
PX	KR 99-62951 A (NEC CORPORATION) 26 JULY 1999 (26. 07. 1999.) THE WHOLE DOCUMENT	1, 2

 Further documents are listed in the continuation of Box C. See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

21 SEPTEMBER 2000 (21.09.2000)

Date of mailing of the international search report

25 SEPTEMBER 2000 (25.09.2000)

Name and mailing address of the ISA/KR

Korean Industrial Property Office
Government Complex-Taejon, Dunsan-dong, So-ku, Taejon
Metropolitan City 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Jung Suk

Telephone No. 82-42-481-5789



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR00/00374

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0593386 A2	20. 04. 1994.	JP 07-234837 A US 5420936 A	05. 09. 1995. 30. 05. 1995